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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/087,291

02/28/2002

Shiyan S. Hua

LUT 20079

3105

48116

7590

06/15/2006

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EXAMINER

WOO, ISAAC M

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/087,291	Applicant(s) HUA ET AL.	
	Examiner Isaac M. Woo	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to Applicant's amendment on March 22, 2006 have been considered but are deemed moot in view of new ground of rejections below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Junqua et al (U.S. Patent No. 6,314,398, hereinafter, "Junqua") in view of Korall et al (U.S. Patent No. 6,996,531, hereinafter, "Korall").

With respect to claim 1, Junqua teaches a method of searching television programming information (i.e., epg, electronic programming guide, col. 2, lines 5-17), Junqua teaches, searching a database in accordance with the search query (i.e., searching program database, col. 3, lines 18-44, col. 6, lines 26-29), Junqua teaches the database containing television programming information (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database); Junqua

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teaches generating search results from the searching (i.e., output on screen display, 46 in fig. 1, col. 4, lines 23-41), Junqua teaches the search results including entries from the database that correspond to the search query (i.e., output on screen display query output for programs, 46 in fig. 1, col. 4, lines 23-41); and, Junqua teaches sending the search results to a television receiver box (i.e., 52, set-top decoder box, fig. 1, col. 4, lines 14-22) of the viewer via a television system (i.e., 50, TV, fig. 1) such that the search results are displayable upon a television operatively connected to the receiver box (i.e., 46, 50, fig. 1, results are displayed on TV screen, col. 3, lines 7-67 to col. 4, lines 1-55). Junqua does not explicitly disclose, receiving a telephone call from a viewer via a telephone system, generating a search query in response to the telephone call. However, Korall teaches receiving a telephone call from a viewer via a telephone system (i.e., receiving input from telephone 12 in voice form via PSTN, public switched telephone network in fig. 1, col.3, lines 47-65 and S10, S12 in fig. 2, col. 10, lines 33-39) and generating a search query in response to the telephone call (i.e., speech input by telephone is converted to text query to database, 23a, 23b, 24 in fig. 1, col. 4, lines 59-64 and S14, S16 in fig. 2, col. 10, lines 33-54). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to formulate searchable text query from telephone input for accessing database (col. 2, lines 23-43).

With respect to claim 2, Junqua does not explicitly disclose identifying the viewer from which the telephone call is received via caller ID. However, Korall teaches identifying the viewer from which the telephone call is received via caller ID (i.e., identifying sender of incoming call and displaying sender name, col. 9, lines 65-67 to col. 10, lines 1-3). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to identify caller's identification in telephone network system.

With respect to claim 3, Junqua does not explicitly disclose search query is at least partially generated from spoken language from the viewer which is received via the telephone system and input into a voice recognition module. However, Korall teaches search query is at least partially generated from spoken language from the viewer which is received via the telephone system and input into a voice recognition module (i.e., by speech recognition unit 23a, 23b in fig. 1, telephone voice query is converted to text query by speech recognition unit 23a, 23b in fig. 1, col. 4, lines 59-64 and S14, S16 in fig. 2, col. 10, lines 33-54). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to convert the speech or voice input to search text query input for database accessing.

With respect to claim 4, Junqua teaches only current television programming information is maintained in the database (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database).

With respect to claim 5, Junqua teaches current television programming information and a period of future television programming information are maintained in the database, (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database).

With respect to claim 6, Junqua does not explicitly disclose deactivating the search results after the telephone call has terminated such that they are no longer displayable on the television. Korall teaches deactivating the search results after the telephone call has terminated such that they are no longer displayable on the television, (i.e., automatic voice unit stops and terminates searching database, col.13, lines 49-54). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to finish database searching by converting voice input to text query searching input.

With respect to claim 7, Junqua does not explicitly disclose announcing a summary of the search results to the viewer (i.e., output, S24 in fig. 2) via the telephone system. However, Korall teaches announcing a summary of the search results to the

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viewer (i.e., output, S24 in fig. 2) via the telephone system (i.e., via PSTN, public switched telephone network in fig. 1, l. 4, lines 23-41), (col. 10, lines 33-54). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to provide search results to viewer according to text query in telephone network system environment.

With respect to claim 8, Junqua teaches the search results include a list of channels showing programs which match the search query (i.e., epg information is displayed, col. 3, lines 17-31, col. 4, lines 23-41).

With respect to claim 9, Junqua teaches the viewer can selectively scroll through the list of channels (col. 2, lines 31-42).

With respect to claim 10, Junqua teaches the viewer can select a channel from the list of channels to view information about the program being shown on that channel (col. 1, lines 58-66).

With respect to claim 11, Junqua teaches database in which television programming information is maintained, see (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database), Junqua teaches searching means for searching database in accordance with the search query received from the

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query generating means (i.e., by natural language processor, speech is converted to text query), (i.e., 54, searching program database, col. 2, lines 5-17, col. 4, lines 14-22), Junqua teaches the searching means generating search results which are sent to a television receiver box of the viewer (i.e., set-top box, 52 in fig. 1) via the television system such that the search results are displayable upon a television operatively connected to the television receiver box, see (i.e., TV, 50, fig. 1, program search results are displayed on TV screen, col. 3, lines 7-67 to col. 4, lines 1-55). Junqua does not explicitly disclose, generating a search query in response to the telephone call received from a viewer via a telephone system. However, Korall teaches generating a search query in response to the telephone call (i.e., speech input by telephone is converted to text query to database, 23a, 23b, 24 in fig. 1, col. 4, lines 59-64 and S14, S16 in fig. 2, col. 10, lines 33-54) received from a viewer via a telephone system (i.e., receiving input from telephone 12 in voice form via PSTN, public switched telephone network in fig. 1, col.3, lines 47-65 and S10, S12 in fig. 2, col. 10, lines 33-39). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to formulate searchable query from telephone input for accessing database (col. 2, lines 23-43).

With respect to claim 12, Junqua teaches the query generating means includes voice recognition module that receives spoken language from the viewer and converts it



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into at least a portion of the search query, see (i.e., 32, by speech recognizer, fig. 1, col. 3, lines 31-67 to col. 4, lines 1-41).

With respect to claim 13, Junqua teaches current television programming information (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database).

With respect to claim 14, Junqua teaches period of future television programming information are maintained in the database, (i.e., 54, program database, fig. 1, col. 3, lines 18-44, EPG data is stored on program database).

With respect to claim 15, Junqua teaches the television system is selected from a group consisting of a digital cable television system, an analog cable television system, and a satellite television system, (col. 1, lines 17-57, col. 3, lines 7-16, col. 4, lines 23-41, col. 9, lines 1-4).

With respect to claim 16, Junqua teaches the television programming information includes abstractions of program content, (col. 3, lines 17-45).

With respect to claim 17, Junqua teaches database includes a searchable field containing identification of program types, see (col. 3, lines 17-45).

With respect to claim 18, Junqua does not explicitly disclose identification means for identifying the viewer from which a call is received. However, Korall teaches identification means for identifying the viewer from which a call is received (i.e., identifying sender of incoming call and displaying sender name, col. 9, lines 65-67 to col. 10, lines 1-3). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to identify caller's identification in telephone network system.

With respect to claim 19, Junqua does not explicitly disclose identification means comprises caller ID. However, Korall teaches identification means comprises caller ID (i.e., identifying sender of incoming call and displaying sender name, col. 9, lines 65-67 to col. 10, lines 1-3). Therefore, based on Junqua in view of Korall, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Korall to the system of Junqua in order to identify caller's identification in telephone network system.

With respect to claim 20, Junqua teaches the search results include a list of channels showing programs which match the search query, see (col. 1, lines 58-66, col. 4, lines 14-22).

**Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Isaac Woo  
June 9, 2006